$R \cdot I \cdot T$	Title: CEE 100 Ger	neral Hand Spinner
Semiconductor & Microsystems		
Fabrication Laboratory	Revision: A	Rev Date: 02/01/2021
Approved by: / / Process Engineer	/ / Equipment Engineer	

1 SAFETY PRECAUTIONS

1.1 Hazards to the Operator

- 1.1.1 **Chemical Hazard** Read the materials safety data sheets for the materials that will be used. Make sure that the lid is closed before spinning a wafer and avoid contact with resist.
- 1.1.2 **Spinning Wafers** Wear safety glasses at all times.

1.2 Hazards to the Tool

- 1.2.1 **Allen Screw** When changing the chuck between 4 and 6 inch, there is a special screw that must be removed from the chuck with an Allen wrench. The screw has a vacuum port in it and if lost, must be replaced with the same type.
- 1.2.2 **Cleaning** Make sure that the waste bowl, lid and chuck are clean. See cleaning instructions. The user is responsible for cleaning the bowl.

2 <u>INSTRUCTIONS</u>

- 2.1 To prevent cross contamination and particles, make sure that the bowl, lid and chuck are clean before starting a run and when finished.
- 2.2 Program Numbers
 - 2.2.1 There are 10 program spots (# 0-9)
 - 2.2.2 **Program #0** is reserved for the standard 4 inch wafer program.
 - 2.2.3 **Program #1** is reserved for the standard 6 inch wafer program.
 - 2.2.4 **Program #9** is open for general use and may be changed by anyone.
 - 2.2.5 **Programs #2-8** may be signed out. These will be purged quarterly.

2.3 Entering a Program

- 2.3.1 Press **Program**, put in the number and press **Enter**.
- 2.3.2 Put in the speed for the first step and press **Enter**. (0-6000rpm)
- 2.3.3 Put in the ramp rate for the first step and press **Enter**. (0-30,000)
- 2.3.4 Put in the time for the first step and press **Enter**. (0-999sec)
- 2.3.5 The program will advance to the next step. To end the program, press the **Clear** button while in the **Velocity** field.

2.4 Running a Program

2.4.1 Make sure that the waste bowl is clean. Solvents should be disposed of in the waste jug and the manifest should be filled out.

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2.4.1 Press **Run**, put in the program number and press **Enter**. Close the lid and press **Start**. The system will do a vacuum check and 2 sec. spin. Dispense the resist, close the lid and press **Start** again to run the program.

2.5 Stopping a Run

2.5.1 Press **Stop**.

2.6 Resetting the System

2.6.1 Press the **Reset** button.

2.7 Cleaning the System

- 2.7.1 When finished with a run, clean the bowl, lid and chuck.
- 2.7.2 Use the Allen wrench to remove the screw. The screw has a vacuum port in it and if lost, must be replaced with the same type.
- 2.7.3 Take the bowl to the hood and clean it with acetone. Any excess fluid should be disposed of in the solvent waste jar. The cleanwipes that have resist on them should be disposed of in the yellow solvent waste can.
- 2.7.4 Replace the bowl and the chuck being careful to properly orient the chuck. Replace the Allen screw.

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